EFFECT OF GAYATRI MANTRA ON PSYCHOLOGICAL VARIABLES OF DISABLED STUDENTS OF GWALIOR

SYNOPSIS

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By,

Rajesh Kumar

(PH-2021-19)

Co-Supervisor
Dr. Vijay Singh Gusain
Assistant Professor
Shri Lal Bahadur Shastri National
Sanskrit University New Delhi

Supervisor
Dr. Pramod Kumar Das
Asstistant Professor
LNIPE, Gwalior (M.P.)

DEPARTMENT OF YOGIC SCIENCES
LAKSHMIBAI NATIONAL INSTITUTE OF PHYSICAL EDUCATION
(DEEMED TO BE UNIVERSITY)
GWALIOR(M.P.), 474002 India

DEPARTMENT OF YOGIC SCIENCES

CERTIFICATE

I hereby declare that the **synopsis "EFFECT OF GAYATRI MANTRA ON PSYCHOLOGICAL VARIABLE OF DISABLED STUDENTS OF GWALIOR"** being submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy in Yoga under the Department of Yogic Sciences, Lakshmibai National Institute of Physical Education (LNIPE), Gwalior,Madhya Pradesh, India during the academic year 2021-2022.

It is a bonafide record of original work carried out under the supervision **of Dr. Pramod Kumar Das** and the co-supervision of **Dr. Vijay Singh Gusain** has not been submitted in full or part to any other university or institute for a degree or diploma.

Rajesh Kumar

(PH-2021-19)

Supervisor
Dr. Pramod Kumar Das
Assistant Professor
LNIPE, Gwalior

(Chairman DRC)

ABSTRACT

This research will be conducted with the aim to determine if there is a possible relationship between the practice of gayatri mantra on the psychological variables of disabled students. 40 disabled studens will be selected from special education institutions gwalior. They will be divided into two groups. Experimental group and control group. Each group will have 20 disabled students. The age range of the subjects will be from 13 to 18 years. The psychological veriable levels of the subjects will be measured by General Intelligence Test by S.M.Mohsin. Concentraction measured by The Six Letter Cancellation Test (SLCT), given by Self confidence were assessed by Standard Hardy and Nelson (1992) and Shot term Memory by B.B. Ashthana. By analyzing the data using statiscal techniques. The result will be presented.

Keywords – Gayatri Mantra, Mantra, psychological variable, Intelligence, Cancentraction, Confidence, Memory, Disability.

TABLE OF CONTENT

S.No	Title	Page .No
1	Introduction	1-6
2	Literature Review	7-8
3	Methodolgy	8-9
4	Expected Outcame	9
5	Bibliography	10-11

CHAPTER –I

INTRODUCTION

The Gayatri Mantra is one of the oldest and most revered Vedic mantras, found in the Rig Veda, and is dedicated to Goddess Gayatri, who represents the universal divine light of wisdom and knowledge.

The Gayatri Mantra, one of the most revered mantras in Hindu philosophy, originates from the Rigveda (Mandala 3.62.10) and is dedicated to Savitr, the solar deity. It is composed in the Vedic Sanskrit language and is traditionally recited for spiritual awakening, mental clarity, and inner peace.

This ancient verse is often translated as a prayer for enlightenment and guidance of the intellect, asking the divine light of Savitr to illuminate the minds of all beings.

Over centuries, the Gayatri Mantra has not only held theological significance but also attracted scientific attention for its potential psychological and physiological benefits. Chanting of the mantra involves rhythmic breathing, vibration, and focused attention, which have been found to activate the parasympathetic nervous system, reduce stress, and improve emotional stability (Telles et al., 2012).

Recent studies suggest that mantra meditation can influence various psychological parameters such as anxiety, depression, attention, and cognitive function (Bhargav & Varambally, 2021). For instance, Sharma (2020) demonstrated that regular chanting of the Gayatri Mantra significantly improved self-esteem and reduced stress levels in adolescents. The neurocognitive mechanisms involved include reduced amygdala activity (associated with emotional reactivity) and improved prefrontal cortex regulation (associated with attention and decision-making).

American Scientist Dr. Howard Steengoril has declared the Gayatri Mantra the worlds most effective prayer after a thorougt examination of mantra, humans and invocations from around the world in his physiology laboratory.He found that the Gayatri Mantra emits 1,10,000 sound waves per second. Generates which is the highest among all the humans. He found that Gayatri Mantra has the ability to develop spiritual power by mixing different frequencies.(deanik udhyoghakikat 2021)

Scientific interpretations suggest that the rhythmic recitation of this mantra stimulates the brain and nervous system. As the tongue, lips, vocal cords, and palate work in harmony during chanting, they trigger specific regions of the brain associated with attention and awareness (Sharma et al., 2008). This process enhances neural connectivity and helps

improve concentration, especially in individuals struggling with cognitive or emotional challenges.

A disability is defined as a condition or function judged to be significantly impaired relative to the usual standard of an individual or group. The term is used to refer to individual functioning, including physical impairment, sensory impairment, cognitive impairment, intellectual impairment mental illness, and various types of chronic disease. Disability is conceptualized as being a multidimensional experience for the person involved. The World Health Organization defines disability as: "Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations".(W.H.O) 2011

Since ancient times, mantras have held a central place in Indian culture. The Gayatri Mantra, composed of twenty-four syllables, is believed to generate subtle fields of conscious and magnetic energy around the body. Its powerful effects on physical well-being are attributed to the specific sounds it contains. The mantra activates hidden energy centers within the subtle body, and the repeated chanting of its syllables stimulates nerves and energy channels (nadis) through vibrations created in the tongue, lips, vocal cords, palate, and related brain regions.

Hence, the present study was undertaken to provide further scientific evidence for beneficial effect of GM chanting on cognitive functions in young adults and adolescents.

Decreased anxiety state and persistent calmness of mind combined with active cells due to rhythmic Vedic mantra chanting could have attributed to improved memory, mental concentration and sustained attention. *(Samajdar & Mukherjee (2020)*

According to Pradhan and Derle (2012), chanting of Vedic hymns improves sustained attention in teenaged school students. In their study participants followed the traditional procedure of loud chanting for best effect.

Chanting improves short-term recall, spontaneous organization of memory and the ability to focus attention. Several studies have been carried out on interventions like asanas, pranayama and meditation. In recent studies based on the 'Sanskrit effect', cognitive and neuropsychological effects on cognition have been tested through general Sanskrit tests (Hartzell, 2018). Also, Vedic chanting pertaining to cognitive functions like attention, memory and concentration are greatly explored in the literature, although these studies focus more on the normal population and psychiatric population with anxiety, depression, hypertension and other psychiatric disorders .

Statement of the Problem

The statement of the problem will be stated as "A Study of Effect of Gayatri Mantra on Psychological Variables of Disabled Students of Gwalior"

The Objectives of the Study

1. To characterize the level of Psychological Variables (Intelligence, Concentration, Confidence and Memory) of Disabled Students of Gwalior.
2. To compare mean score of Psychological Variables (Intelligence, Concentration, Confidence and Memory) at Pretest and Posttest stage of Gayatri Mantra Group .
3. To compare adjusted mean score of Psychological Variables (Intelligence, Concentration, Confidence and Memory) among disabled student of Gwalior by considering pre score of Psychological Variable (Intelligence, Concentration, Confidence and Memory)as covariate .

Hypothesis

On the basis of literature reviewed, experts' opinion, observation and experience of research scholar and objectives of the study, following hypotheses were formulated:

1. There will be a significant effect of Gayatri Mantra on intelligence of disabled students
2. There will be a significant effect of Gayatri Mantra on Concentration of disabled students
3. There will be a significant effect of Gayatri Mantra on Confidence of disabled students
4. There will be a significant effect of Gayatri Mantra on Memory of disabled students

Delimitations

This study will have the following delimitations:

1. This study will be delimited to the forty (40) disabled Students of Madhya Pradesh Gwalior.

2. Further this study will delimit school-going children of Madhya Pradesh Gwalior .

3. Further this study will be delimited to the subject's chronological age between13-18 years.

Limitations

Certain elements such as dietary patterns, daily routines, lifestyle choices, and eating habits may have influenced the results of this investigation; however, they will not be taken into account in this study.

Significance of the Study

The results of this study may be of significance in the following ways:

The results of the study may provide an authentic understanding of Gayantri Mantra.

The result of the study may highlight the effect of Gayantri Mantra on Disable persons.

This study may be of significance in providing a scientific explanation for the use of Gayantri Mantra for Disable persons.

Important Definition and Explanation of the Terms

Disability

Disability refers to a physical, mental, intellectual, or sensory impairment that, in interaction with various barriers, may hinder full and effective participation in society on an equal basis with others.

A widely recognized definition is from the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD):

"Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."
— United Nations, 2006

"Disability is a restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being."
— World Health Organization (WHO), 1980, International Classification of Impairments, Disabilities, and Handicaps (ICIDH)

Intelligence

Intelligence is commonly defined as the ability to acquire and apply knowledge and skills. It involves reasoning, problem-solving, learning, perception, and the use of language.

A widely accepted academic definition comes from the American Psychological Association:

“Intelligence is the ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, and to overcome obstacles by takingthought”.(*American Psychological Association, 1995)*

Concentration

Concentration is the mental process of directing one’s attention toward a particular object, task, or activity while excluding distractions. It is essential for learning, problem-solving, and effective performance in both academic and professional settings.

A widely accepted definition is:

"Concentration is the ability to direct one's attention in accordance with one's will. It means control of the attention. It is the ability to focus the mind on one subject, object, or thought and at the same time exclude from the mind every other unrelated thought, idea, feeling, and sensation."
— *Remez Sasson, 2008*

Confidence

Confidence refers to a person's belief in their own abilities, qualities, and judgment. It plays a crucial role in motivation, performance, and psychological well-being.

"Confidence is the belief that one can successfully perform a desired behavior."(*Albert Bandura, 1977)*

Memory

Memory is the cognitive process of encoding, storing, and retrieving information. It is fundamental to learning, decision-making, and behavior.

A well-regarded definition from cognitive psychology is:

"Memory is the means by which we draw on our past experiences in order to use this information in the present."
— *Sternberg, R. J. (2009)*

CHAPTER-II

REVIEW OF RELATED LITERATURE

(Samajdar & Mukherjee,2020) This prospective study involved 45 athletes, divided into three groups of 15 each. Two groups practiced regular meditation—with one group incorporating GM chanting—while the third served as a control group. Participants were assessed at the start and after three months on attention (via the six-letter cancellation and digit-letter substitution tests), memory (using forward and backward digit span and a multiple-choice apparatus), anxiety (with the State-Trait Anxiety Inventory), and overall mental state (using the MMSE). Statistical analysis of the results revealed that the group practicing meditation with GM chanting showed significant improvements in attention and memory. They had fewer errors and quicker responses to audio-visual stimuli in the multiple-choice apparatus. Enhanced performance in the digit cancellation test indicated better sustained attention, reduced distraction, and improved focus. Notable reductions in both state and trait anxiety were observed in the GM chanting group. Additionally, both meditation groups demonstrated improved mental states compared to the control group.

Candrawati et al., (2018) The study aimed to examine the impact of mindfulness combined with the Gayatri mantra on reducing anxiety among elderly Hindus in Bali, Indonesia. Using a quasi-experimental one-group pretest-posttest design, the study included 34 elderly participants selected through purposive sampling. Anxiety levels were assessed with the Geriatric Anxiety Scale (GAS), and data were analyzed using a t-test. The findings indicated that mindfulness with the Gayatri mantra effectively reduced anxiety in the elderly. This approach may serve as an alternative method to help prevent anxiety recurrence in older adults.

(Das & Pandey, 2020)A pre-post study conducted on a single group of 36 female athletic students who received breath awareness, inner visualization, and the chanting of the Gayatri mantra to evaluate the effects of meditation intervention on their mental skills. For twelve weeks, the intervention was administered for forty minutes each day, five days a week. The mental skills measured by Bull's mental skill inventory, which included several dimensions of relaxation ability, imagery capacity, anxiety and concern management, concentration ability, and self-confidence ability, have significantly improved, according to the results.

Pharmacology, (2020) Another study had 45 athletes, aged 20 to 22, who were split up into three groups of 15. Group 2 conducted only regular guided meditation, Group 3 did no meditation and acted as the control group, and Group 1 practiced Gayatri mantra (GM) in addition to regular guided meditation. At baseline and three months into the intervention, all

groups underwent assessments on attention (6 letter cancellation and DLST), memory (digit span F–B), state and trait anxiety, and mental state using the MMSE. The group that combined GM with standard guided meditation shown much greater gains in attention, memory, anxiety, and mental health, according to the results. The control group did not exhibit any significant improvement, while the regular guided meditation group did show a substantial improvement..

(Sharma, 2019) This study aims to evaluate the impact of reciting the Gayatri Mantra on young people's psychophysiological condition and display of anger. The experimental group, consisting of 25–25 year olds, and the control group have a sample size of 30. This study discovered that chanting the Gayatri Mantra for fifteen minutes improves the psycho-physiological condition and reduces state anger, trait anger, and outward manifestation of anger while also increasing interior control of anger.

(Tripathy, 2018) The current study set out to determine how practicing Pragya Yog while reciting the Gayatri Mantra affected the degree of violence displayed by male teenagers. Using simple random sampling without replacement, 30 subjects (college guys) were chosen at random from Bhawani patna Central School in Kalahandi, Odisha, for this study. Data was gathered both before and after a one-month intervention using an aggression measure that was created and standardized by Roma Pal and Dr. Tasnem Naqvi. The findings showed that singing the Gayatri Mantra while performing the Pragya Yog considerably reduced the subjects' level of hostility.

CHAPTER-III

Methodology

Variables

Independent variable: Gayantri Mantra

Dependent variable: Intelligence, Concentration, Confidence, and Memory

Participants:

40 students (age 13–18) with mild to moderate disabilities (intellectual, learning, or sensory impairments), selected from special education institutions.

Design:

Pre-test and post-test experimental design.

Experimental group: 20 students receiving Gayatri Mantra chanting sessions.

Control group: 20 students not receiving the intervention.

Intervention:

108 times of Gayatri Mantra chanting from Monday to Saturday for 12 weeks

Instruments:

Intelligence To measure the intelligence of the subjects specialized questionnaire has been take which is General Intelligence Test by S.M.Mohsin.

Cancentraction The Six Letter Cancellation Test (SLCT) seat will be used to measure memory. At the top of each seat are the names of six target letters. It takes 22 rows and 14 columns to do a discard of 6 characters. In 90 seconds all 6 letters at most are canceled out.

Confidence The evaluated psychological parameters were Self confidence were assessed by Standard Hardy and Nelson (1992) Questionnaires the unit of measurement was in Marks.

Memory To measure the Memory of the subjects specialized questionnaire has been take which is Shot term Memory by B.B. Ashthana.

Data Analysis:

1. To characterize the level of Psychological Variables (Intelligence, Concentration, Confidence and Memory) of Disabled Students of Gwalior, Descriptive Statistic will be used.

2. To compare mean score of Psychological Variables (Intelligence, Concentration, Confidence and Memory) at Pretest and Posttest stage of Gayatri Mantra Group , Dependent T-test will be used.
3. To compare adjusted mean score of Psychological Variables (Intelligence, Concentration, Confidence and Memory) among disabled student of Gwalior by considering pre score of Psychological Variable (Intelligence, Concentration, Confidence and Memory)as covariate, One Way of ANCOVA will be used .

Expected Outcomes:

This study is going to contribute to the improvement of psychological variable among disabled students with the gayatri mantra. Through this research, we will be able to know whether gayatri mantra will improve those factors of psychological that deficiency psychological variable during disability. Cognitive Functioning Improved focus, memory, Cancentraction span, intellectual ability and mental clarity.Mood Enhancement Elevated mood, positive affect, and better self-confidence.

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